



Evans Water and Sewer Board

Evans Community Complex
Council Chambers
1100 37th Street, Evans, Colorado

Time and Date: January 21, 2021 @ 3:30 p.m.

1. ROLL CALL

Chairman: Jeff Oyler
Vice-Chairman: Glenn Snyder
Commissioners: Randy Blewer
Brett Bloom
Michael Thuener

Ex-Officio Members:

Mayor: Brian Rudy
City Manager: Jim Becklenberg

City Staff:

Randy Ready, Public Works Director
Scott Sandridge, Operations & Parks Manager
Rick Pickard, Senior Civil Engineer
Anne Best Johnson, Community Development Director
Mark Oberschmidt, City Engineer

2. APPROVAL OF MINUTES

Approval of minutes from 12.17.2020 regular board meeting

3. OTHER ITEMS

Water Distribution and Conservation Updates

- A. Introduction of Bret Kelso, Water Foreman (Scott Sandridge)
- B. 2020 Water Treatment Cap Status (Rick Pickard) – Attachment 1
- C. Initiation of the Water Efficiency Plan (Anne Best Johnson)
- D. WaterNow Alliance Grant Update (Anne Best Johnson) – Attachment 2
- E. Implementation of the CDBG Fixture Replacement Program (Anne Best Johnson)

Other Major Project Updates

- F. Idaho Street CDBG Project, Waterline and Stormwater (Mark Oberschmidt) – Attachment 3
- G. Tuscany Non-Potable System Construction (Mark Oberschmidt)
- H. Waterline Replacement Design (Mark Oberschmidt) – Attachment 4
- I. Utility Master Plan (Mark Oberschmidt) – Attachment 5



Evans Water and Sewer Board

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Time and Date: December 17, 2020 @ 3:30 p.m.

1. ROLL CALL – 03:30 pm

Chairman: Jeff Oyler – present
Vice-Chairman: Glenn Snyder – present
Commissioners: Randy Blewer – not present
Brett Bloom – present
Michael Thuener
Ex-Officio Members:
Mayor: Brian Rudy – present
City Manager: Jim Becklenberg – not present

City Staff:

Randy Ready, Public Works Director
Scott Krob, City Attorney
Mark Oberschmidt, City Engineer
Scott Sandridge, Operations & Parks Manager
Robby Porsch, Wastewater Superintendent
Rick Pickard, Senior Civil Engineer
Karen Sabin, Public Works Administrative Specialist

2. APPROVAL OF MINUTES – 03:31 pm

Approval of minutes from 10.15.2020 regular board meeting

****Motion to approve 10.15.2020 Minutes. Second. Passes unanimously.**

3. OTHER ITEMS

A. Water Law Discussion (Scott Krob, City Attorney) – 03:32 pm

First session is about the history and basics of water law. There will be a second meeting talking about how all this applies to Evans after the new year. See .pptx presentation for details.

Question: Do the different districts control the well water?

Answer: Wells and ground water – two types: tributary and non-tributary groundwater. Tributary is water that would end up in a stream in the next 100 years. Non-tributary water is very deep. Located mostly in the eastern part of the state. Wells in the Evans area are tributary wells. Drilled in the alluvium of the stream. They are all administered as part of the surface water. Virtually all wells in Division 1 are the same, and they are treated the same as a ditch right. If you drill a well and take water of the system, you would have to augment that well by putting water back in the system.

Question: If you drill deep enough to get into an aquifer, can you bypass that?

Answer: Yes. It has to be a non-tributary aquifer. A lot of those wells are 800 to 1000 feet deep. If you drilled that deep in Evans, you probably wouldn't hit an aquifer. Non-tributary water belongs to the landowner. If you own land in east

Colorado, you own the water that runs underneath it. Most people cannot afford to drill that deeply, so farmers and ranchers often pool their resources and share one well that is independent of the appropriation system.

B. 2021 Work Program Preview – 04:15 pm

1. Capital Projects (Mark Oberschmidt)

This coming year we will be working on design. Three waterline replacement projects. Have eight urgent project that are high risk for the City to have potential emergency repairs. We have spaced those out over a few years as budget allows and we are starting on the top three this year. 35th and 39th Street are being redone in an effort to get the main lines out of intersections. Currently we have five crossing of highway 85. We'd like to eliminate the one at 37th and upgrade the one at 35th and 39th. 40th Street is older, but not as old as the one on 39th Street. If we do look to abandon that in the future, we would just run pipe up and meet the newer one at 39th. May need to upsize the pipe at that point. The fewer crossings we have under the highway the better. New pipe—plastic—tends to have a longer life than ductile iron like was used in the past. We'd like to design the system so that if we have to shut one pipe down, we can back feed it to a different one and make sure we maintain water flow. We're looking to design these in 2021 and start construction in 2022. If budget allows, we'll start another few projects in 2022 and continue over the next 10 years.

Question: Are we going to lose water pressure with newer bigger pipes?

Answer: No. We're upsizing an 8-inch to 12-inch and creating a loop that will collect more water, so we'll have more water flowing through there. Pressure will be fine.

Tract O Tuscany: Contractor is going to mobilize right after the first of the year. That non-potable system should be done and tested this spring and ready to go by this irrigation system. Houses and mutli-family housing in that area will all be served by that non-potable system. It will save the City a bunch of money as far as reaching our potable water cap with the City of Greeley.

We are looking at doing a feasibility study and will hopefully get a consultant on board by end of 2021. The study will be on whether we can service the area south of the river. We'll be looking at that area and what infrastructure is there, but we will also look at the land uses that are set to be in existence in that area when developed. The City's Master Plan is being updated, so we are watching that growth management area during the update.

Along with that, we are going to update our water model. It was last updated in 2016. We need to update it so we can better plan for developments that are coming in—like Peakview—that will require extensive infrastructure. An updated water model will help us look at those types of questions as development happens. A consultant will help us set up the model so that staff can run it once we get the hang of it.



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Also looking to talk to Central Weld about a potential partnership. They have infrastructure on the south side of the river. It might be undersized; we might need an 8- or 12-inch line where they currently have a 4-inch. It would help the City develop without having to take on the expense of taking infrastructure across the river.

Question: At this point we don't do anything with Central weld?

Answer: All our water comes from the City of Greeley. If we can diversify our water portfolio and get money at normal demand rates instead of the high demand rates that Greeley will charge, we could save the City money.

31st Street Storm Sewer: Our goal is to get that under construction in spring of 2021. Clean out and add a few structures for better water flow management and increase the amount of water we can take off the street.

Detention pond in front of Kum & Go: Located in between trees and highways. Vacated that ROW but dedicated it as a drainage easement. Will be a detention pond. It will help the stormwater pipes not surcharge as much as they are currently.

35th Street/Heritage outfall to river: This will be a large pipe extending east across 1st Avenue underneath RR all the way to the river that will help reduce the flooding that occurs in that area. We are replacing a 24-inch pipe with a much larger one. Normally CDOT would like us to bore under the highway, but we convinced them that due to soil conditions, boring was high risk for road settling. Instead, we are going to do it with an open trench and flow fill it when we are done.

Question: Will we have a chance to inspect the stormwater line at 31st?

Answer: Looking to schedule a time to clean it all out. We will probably be doing that middle part of January or so.

Question: Is 37th Street stormwater cleared out?

Answer: We did a substantial portion of it, but not sure how far they got. Water comes down 37th street itself, we can't control that. But water that comes off the City lot and the industrial area south of us overtops St. Vrain. We may adjust the detention pond here on our property and then take it under the street. That would relieve some of the pressure that is happening on the east side as a short-term solution. A long-term solution is installing a very large pipe at St. Vrain and 39th and taking it south to the river so it never even makes it to the highway.

2. Operations

- Water (Rick Pickard) **04:36 pm**

NISP: NISP is now happening. It is not longer a concept, it's a reality. 2020 work was below budget, so we have money to carry forward to 2021. Evans reduced



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participation in NISP from 1600 af to 1200 af. That Agreement was just completed – paid us \$705,000. It is currently a buyer's market, not a seller's market; it's hard to make a profit right now. Low-interest long term loan is being considered as a funding source for construction. Had been looking at just bonds, but this federal loan is very encouraging. Mitigation efforts on Poudre River; the bypass allows fish to go back upstream and the fish are using it. The project had to get several permits.

Federal: ROD was submitted and we are projecting February 2021 approval of this. Opponents of the project may file a case against us to delay it or get it overturned. Windy Gap project has been given a favorable ruling on their ROD. Since ours is similar in nature, we stand a good chance of prevailing if they tried to take us to court.

State: 401 water quality certification permit was approved. Objection case was filed by opponents. Our permit was recently unanimously upheld by the courts.

Larimer County: 1041 permit. Approved by commissioners. We haven't heard that opponents are going to try to contest it at the County level.

The original time for review for the Record of Decision (ROD) approval ended in November, but the Army Corp. wanted additional time. Design activities will continue this year. Selection of the GM/GC is in the process; we are down to two candidates for this. We expect to make a final decision in first quarter.

Highway 287 relocation design continues. Had to make some changes to where it was. We also need to acquire the land, which is progressing. The area where the water comes off the river and settlement design has begun (forebay). That process is looking at a number of environmental issues and water quality issues. We have contacted mitigation firms. We can buy a portion of their bank instead of trying to build our own.

We are also acquiring pipeline easements. There's been discussion of expanded or continued communication to members, boards, councils, even opponents. What can Northern Water do to help us out? There were some really good ideas. We want to concentrate our publicity on our customers/residents. We want our customers to know that we are working toward water efficiency. We want to build relationships, especially with opponents. We want to invite Northern to come over and make their presentation on communication.

NISP staff has been very effective on the permitting process. Want to develop our own message to customers and residents that explains why NISP is important to Evans. We can talk about the recent fires, water quality issues/rehabilitation of burned areas. Basically, we want to promote the benefits to people.

This is probably the last new source of water in Colorado. And it will also provide storage during drought conditions; we get 4.25 times our membership of 1200 af in drought storage. The river will be better when we are done. We need to

advertise that. NISP lessens our reliance on native and CBT water, and it is environmentally responsible. We have challenged ourselves to communicate better.

- **Wastewater (Robby Porsch) 04:50 pm**

Projects: Our two big projects in 2021 are emergency overflow reconstruction. The original pond liner has never worked; we are reconstructing it out of concrete for emergency storage. All this is part of the decommissioning plan. We will remove all biological material and no longer have to permit it.

Annual rolling projects: major repairs, manhole reconstruction, pipe lining, and annual solids handling which is budgeted for \$300k. At the 2020 rates, that would get us about 375 tons of solids. We are working on annual building of funds toward plant equipment repair for larger pieces of equipment as well as major structure maintenance and/or replacement if something happens.

We are still working on capacity expansion.

Operations: The contractor is still working on jetting and camera at Hill n Park. 39k feet cleaned and TVd. This information will feed directly into spot repair and manhole repair projects for 2021.

438 tons of solids was removed. 200 tons was a rollover from 2019 project that they couldn't complete due to weather (frozen ponds). Just completed east wasting lagoon yesterday.

Source sampling projects. We have spent multiple months comparing flow from the two drainage basins (HnP and old Evans). The Evans basin is the culprit. Got another portable sampler into the two main interceptors that feed that lift station to try to narrow it down from there. With that extra sampler, we can go upstream and downstream of a suspect contributor and confirm exactly what is happening.

Work plan for 2021 includes jetting, working in Industrial Park, Platte Industrial Center, old Evans on the east side of tracks, Carriage Estate (Weld County that we service), North Point, The Landings, Willowbrook, and Ridge at Prairie View. We will also finalize the industrial pretreatment code. We should have that before you to take a look at in late January to February. Once we sample areas and figure out who our main contributors are, we can use that Code to even it out.

- **Operations (Scott Sandridge) 04:58 pm.**

Operations just hired new water foreman who will start January 4. He brings a lot of experience and we are excited to have him.

We've been given funding to purchase new antenna for meters. A big operational cost is monthly shut offs. We are testing about 40 of those meters, but installation has been postponed due to COVID. Hopefully we can get the antenna installed in

next month or so and begin piloting the system. Average shut off volume is about 140 a month, which takes us 3 to 4 days depending on the time so year. Remote shutoff will allow us to do it from computer in office.

Question: Do you have to replace meters?

Answer: Yes. We're going to target repeat offenders first. At the most it will be about 150 meters. We can reuse the meters we pull. It will be significant savings if you look at hours and trucks, and the meters will be repurposed.

Comment: That's a lot of time, and those people aren't very happy

Response: Yes.

Question: What are the man-hours for a meter changeout?

Answer: It's about an hour to hour-and-a-half, including on-site programming.

The groundbreaking out at Peakview will be a big deal as well. We're looking forward to it. As that comes online the next step will be where do we need to look for an antenna location for our radio read system. We've never had an issue with the antenna location on 35th avenue, but we'll need to look at a second one.

Question: What about the school out at 65th, could you put it there?

Answer: We are looking at that, as well as potential opportunities to partner with cellular companies that have towers already built. Census is able to tell us what a prime location would be.

Tuscany non-potable system and the pump station there will be a big project too, as well as the Willowbrook non-potable system that we bought. We've helped them over the years, so we have user knowledge, but we'll now be the operators.

Water conservation is becoming a big deal. We're in the process of applying for a grant to re-landscape some stuff out in front of the City Complex using low water use design. There is an opportunity through Northern Water. We got a grant from them last year and used it to re-landscape the entrance to the cemetery.

Question: Can we get people to eliminate high water toilets and stuff like that? I know Greeley does that.

Answer: Planning is looking at that as part of the water chapter of the Master Plan. They have found a grant opportunity for toilets, shower heads, etc., as part of that process.

Stormwater: In 2019 we jetted about 7k feet stormwater. This year we did about 18k feet of pipe. That puts us on about a five-year rotation. That's about right, but it may change as we grow. We haven't gotten the footage back from this year yet, they are just finishing up. We saw some small issues in 2019 footage, but nothing big. This year with so much more footage, we will have a maintenance project to handle issues that we see. We did make it across the highway this



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year. In 2021, we'll probably get from the highway to 17th or 23rd avenue. We're expecting pipe quality to increase as we move west because pipe is newer.

The City of Greeley just transferred 17 Greeley customers to Evans. These are old County customers along 49th and 37th Streets and 47th Avenue in construction zones. Water rights will come with them.

Question: How much water?

Answer: Eight shares of GLIC and a half share of CBT.

05:13 pm

****Motion to adjourn. Second. Passes unanimously.**

Adjourned 05:13 pm



CITY OF EVANS

Water Law 101

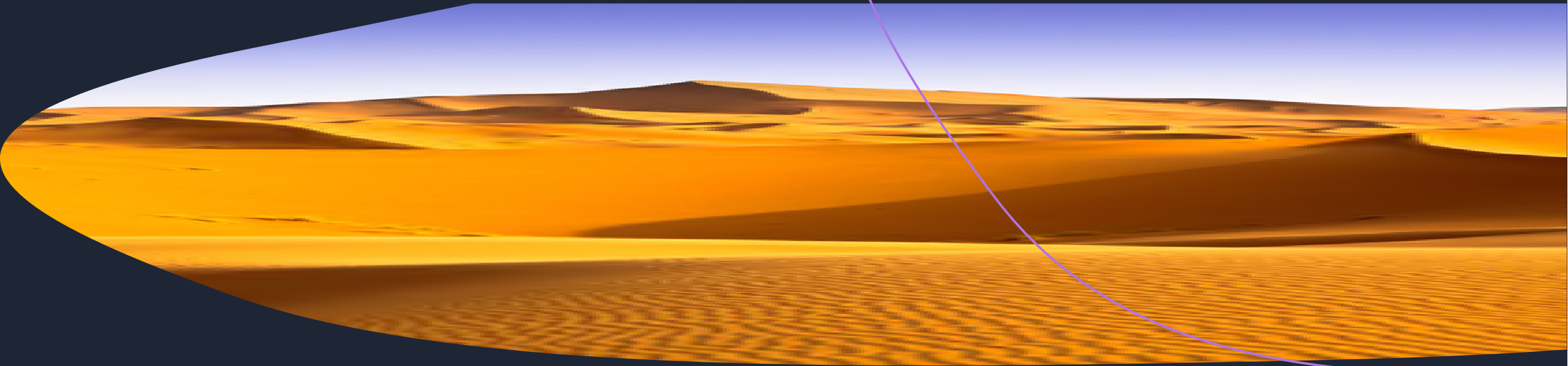
Water law in the Eastern United States

- Not much of an issue:



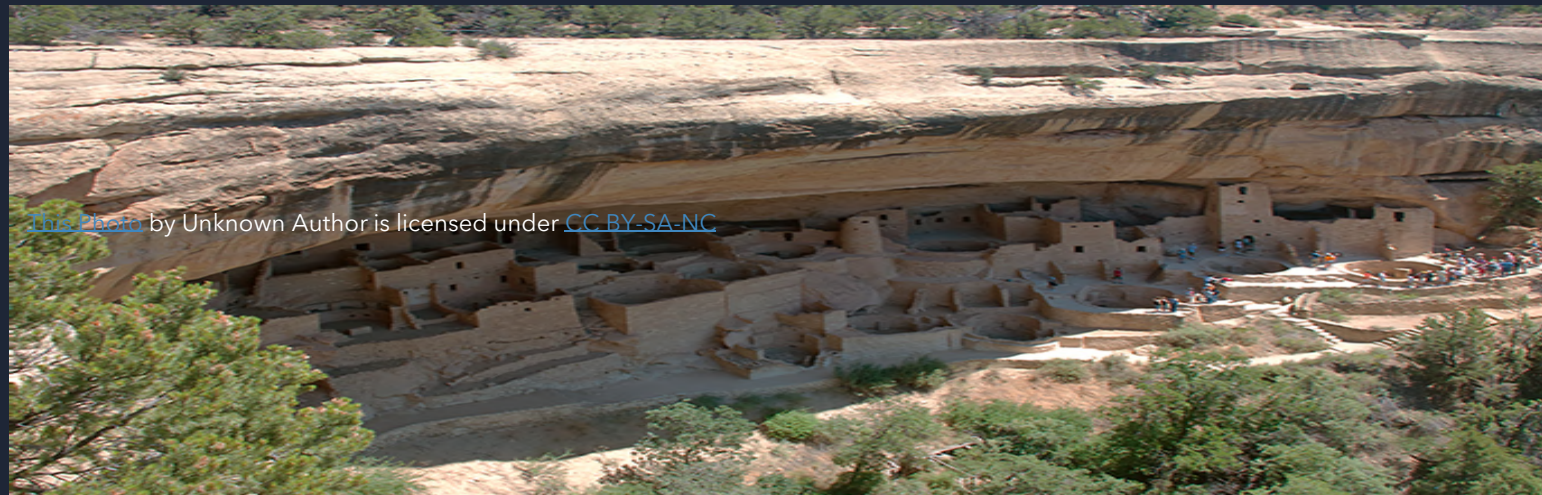
Water law in the Western United States

- Big Issue:



Early water storage in Colorado

- Colorado is not quite a desert, technically a “semi-arid” region where water is in short supply.
- Early water storage in Colorado: Mesa Verde – 560 A.D.



Early water
rights in
Colorado

1850's - First
recognized water
rights -

People's Ditch -
1852 - La Jara
Valley

Enough water, few water users





Native Americans and Early Explorers

- Little need for formal water rights

GOLD RUSH!!!



1858-1861 Generated need for reliable water rights to mine for and process gold.



1861 Colorado Territory was created




Beginning of farming/ranching to support the new territory

Conflict among water
users began




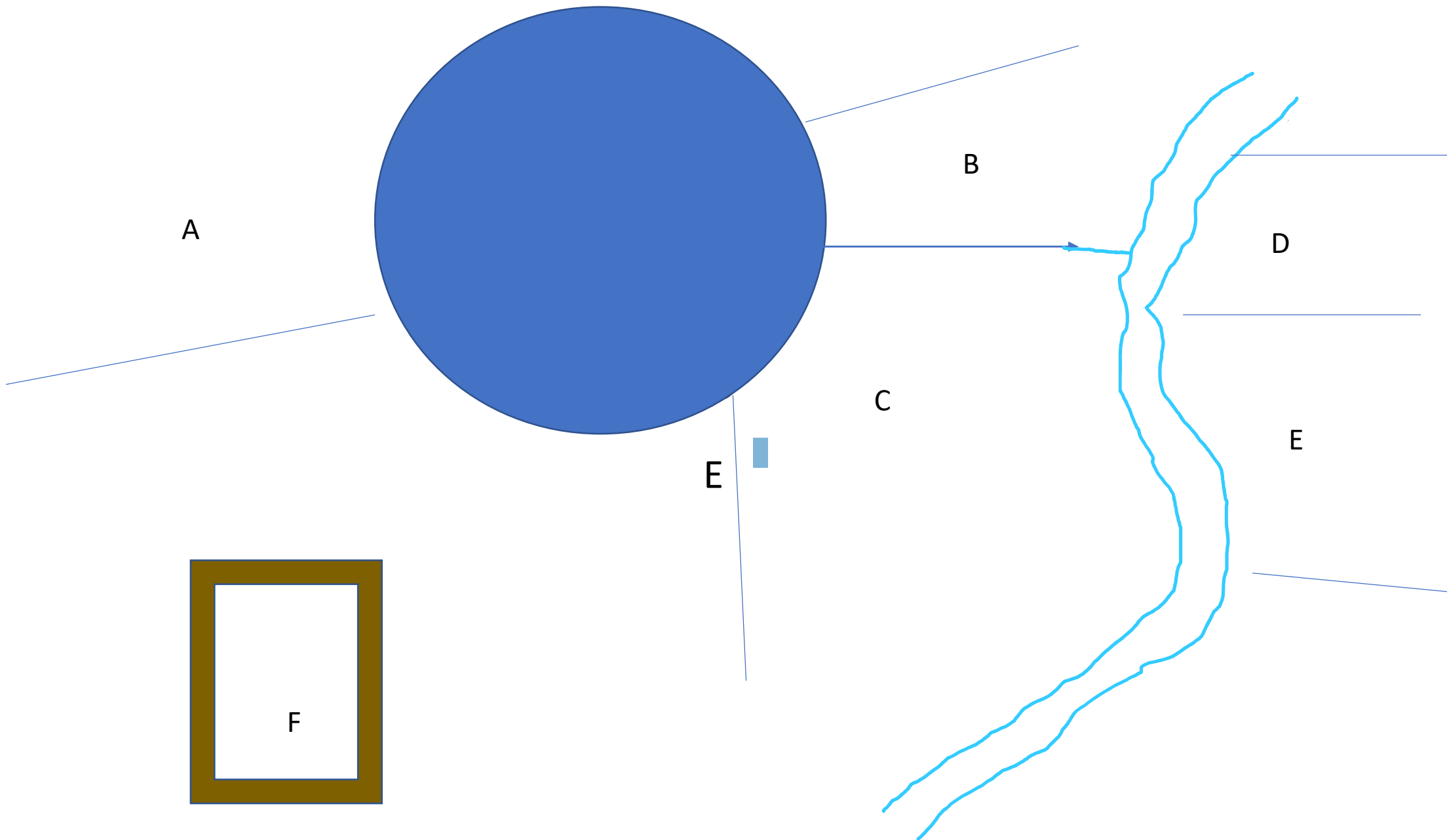
VS





Eastern approach to establishing water rights

- Property adjacent to water bodies (riparian and littoral rights)
 - Proportionate sharing of common water body
 - Does not work where little land adjoins water bodies
- 

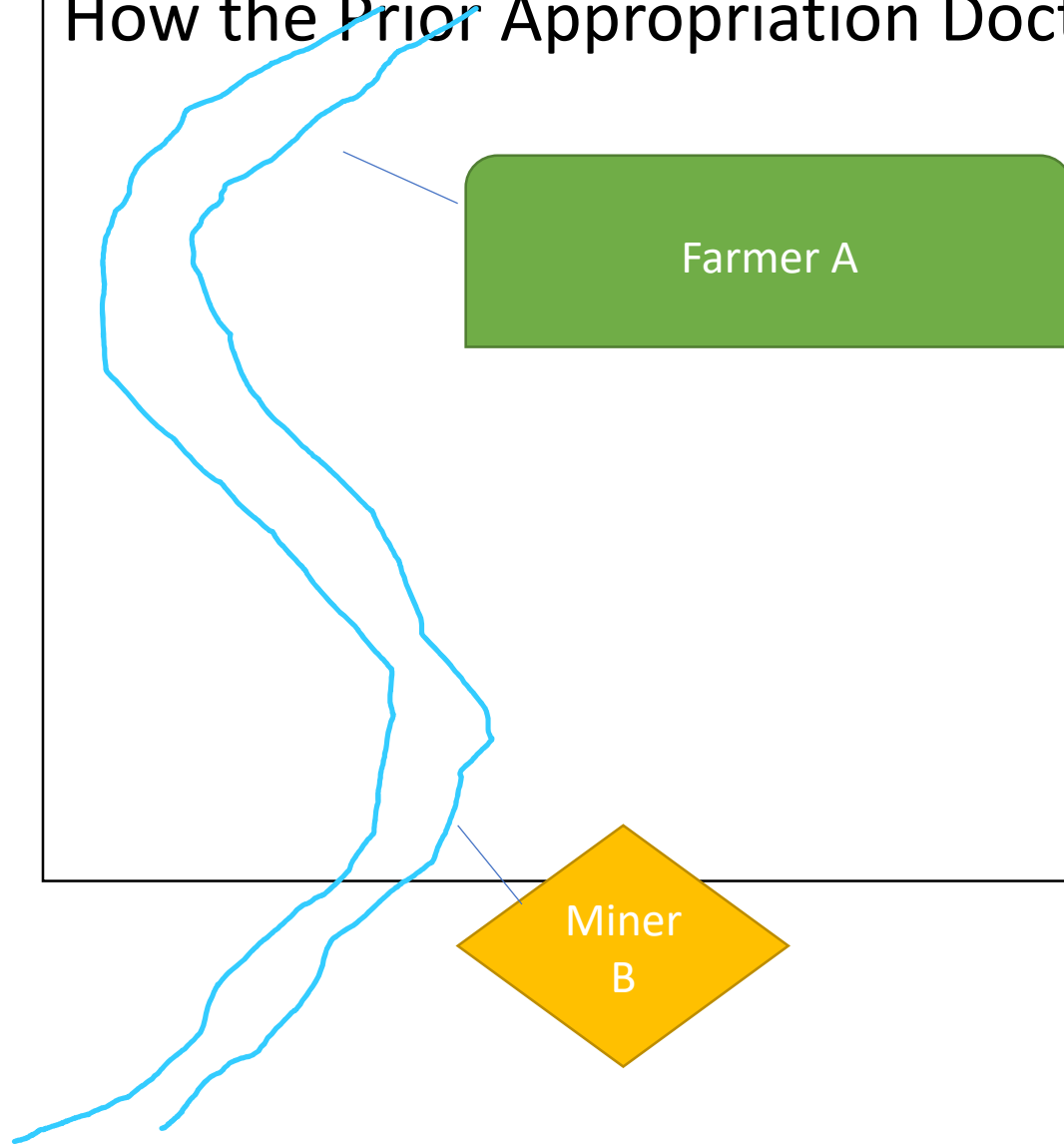


Colorado's solution: Prior Appropriation Doctrine

- First in Time First in Right



How the Prior Appropriation Doctrine Works:



OBTAINING/PERFECTING A WATER RIGHT

- -Diversion of water
- - Application of water to “beneficial use”



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Basic Elements of a Water Right

- Date of appropriation
- Point of diversion
- Place of use
- Type of use (irrigation, domestic, municipal, industrial, etc.)
- Rate or amount of use - cubic feet per second (cfs) or acre-feet (af)
- Season of use (irrigation season, year around)
- Usually single use only, no right of reuse
- (Other aspects)



Types of Water Rights

- Absolute versus Conditional
- 

Conditional water rights and due diligence



160 Acres = 20 acres + 140 acres

190 Acre Feet = 35 Acre feet Absolute + 155 Conditional
- Quinquennial Finding of Due Diligence

Types of Water Rights

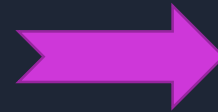
- Direct Use versus Storage Water Rights



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Limited conflicts among water users

- Not too many users in the pool

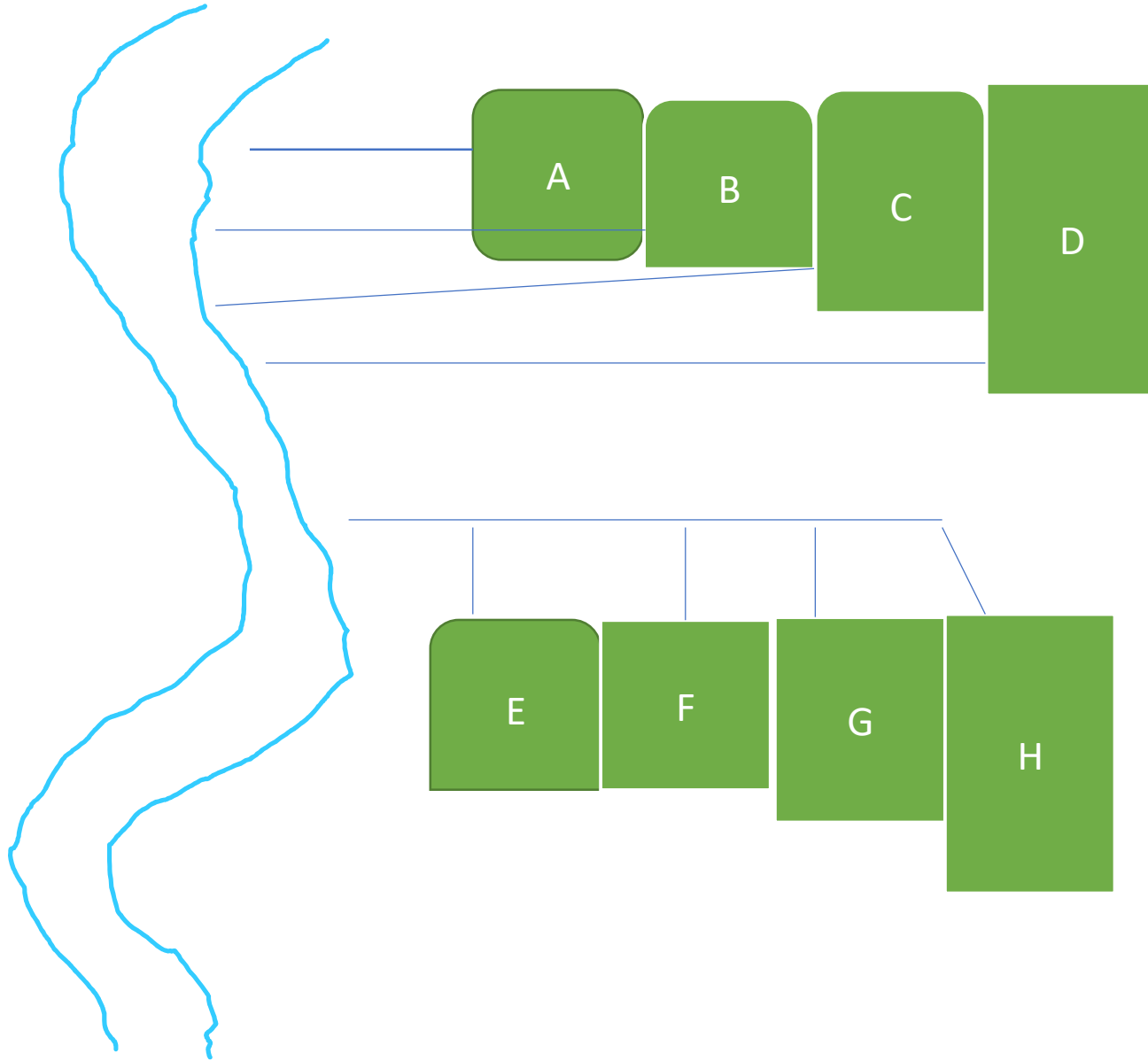


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Settlement of Lands Further Removed from the Stream


- The Rise of Mutual Ditch Companies

Mutual Ditch Companites – Economies of Scale and Common Ownership of Ditch Rights Through the Ditch Company



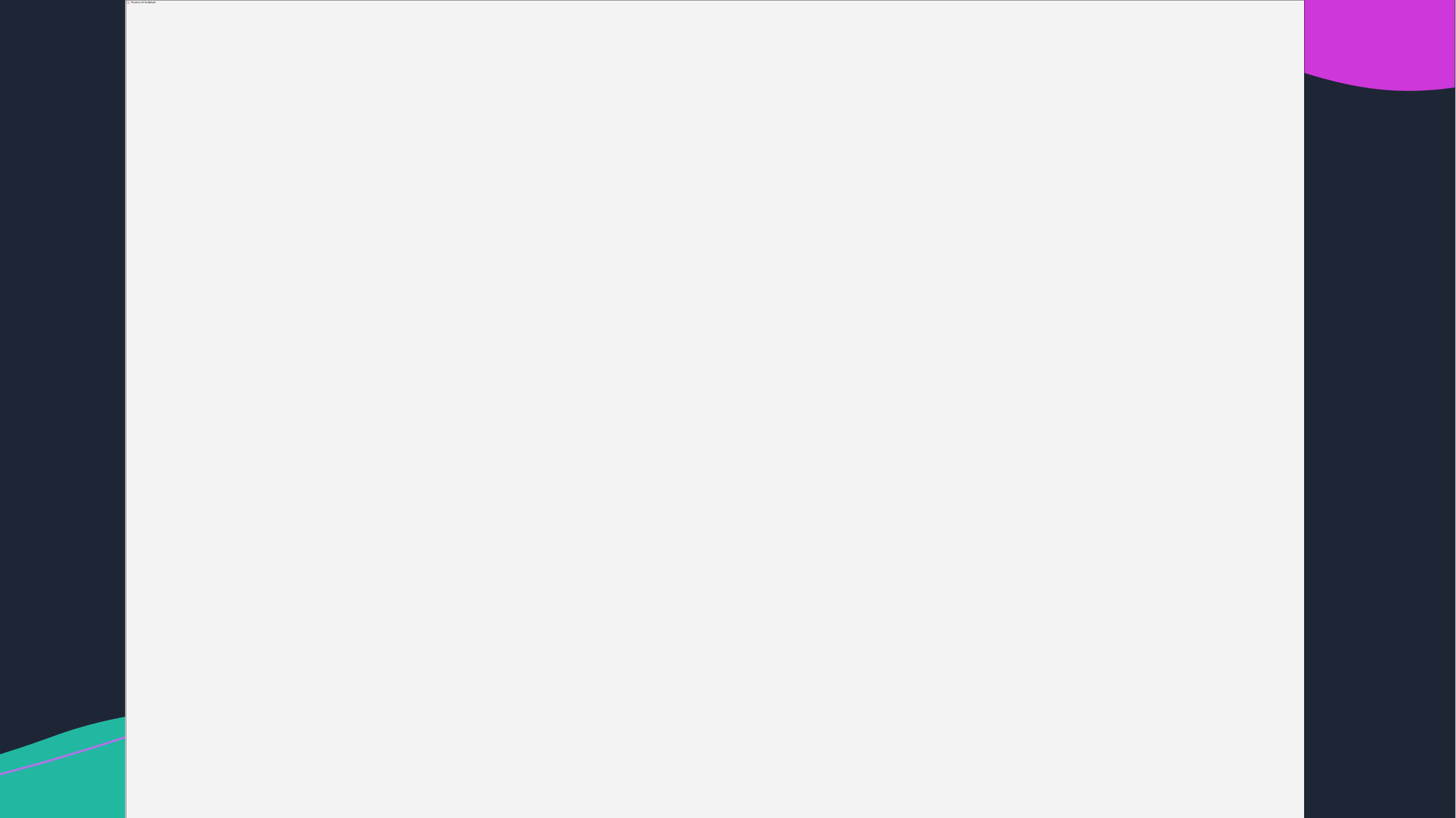


Need for Administration of Water Rights

- State Engineer's Office
 - Created 1879
- 

Need for Administration of Water Rights

- Division of Colorado into 7 Water Divisions
- Division 1 - South Platte River
- Division 2 - Arkansas River
- Division 3 - Rio Grande River
- Division 4 - Gunnison River
- Division 5 - Colorado River
- Division 6 - Yampa and White Rivers
- Division 7 - San Juan and Dolores Rivers



Need for Administration of Water Rights

- (Division 1 – South Platte River
- Water Districts within a Division
- Within Water Division 1, Evans is located in:
 - - District 4, which is the Big Thompson River basin
 - - Water Commissioner for District 4: Jean Lever



Need for Administration of Water Rights


- General Stream Adjudications in each Water Division
- 

Over-appropriation

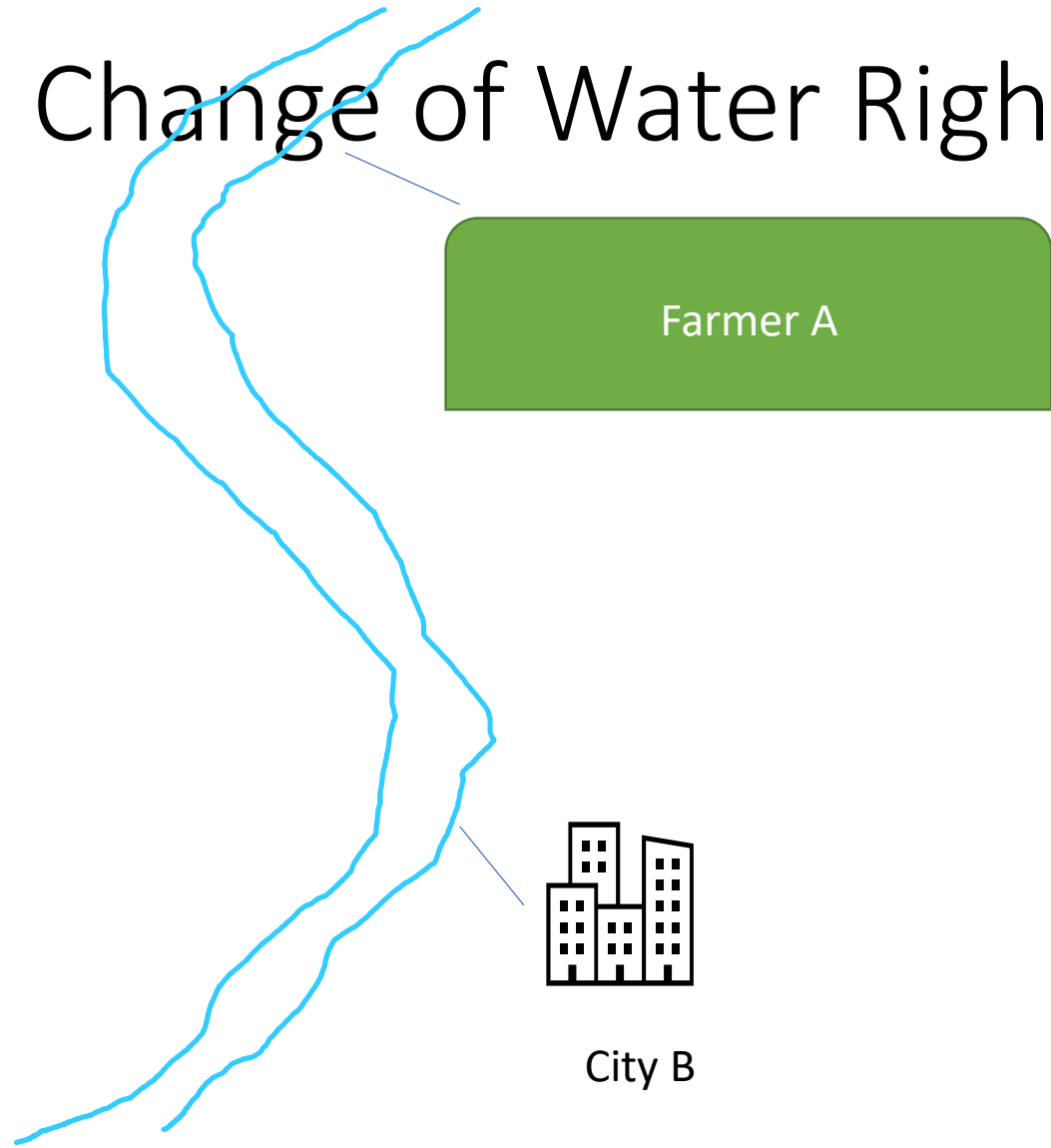
- By the 1890's most of the stream systems were appropriated (at some or all times of the years a call for water by a senior appropriator is not being satisfied.)



Efforts to address over-appropriation: Moving existing water rights around

- Change of water rights, exchange rights, plans for augmentation
- 

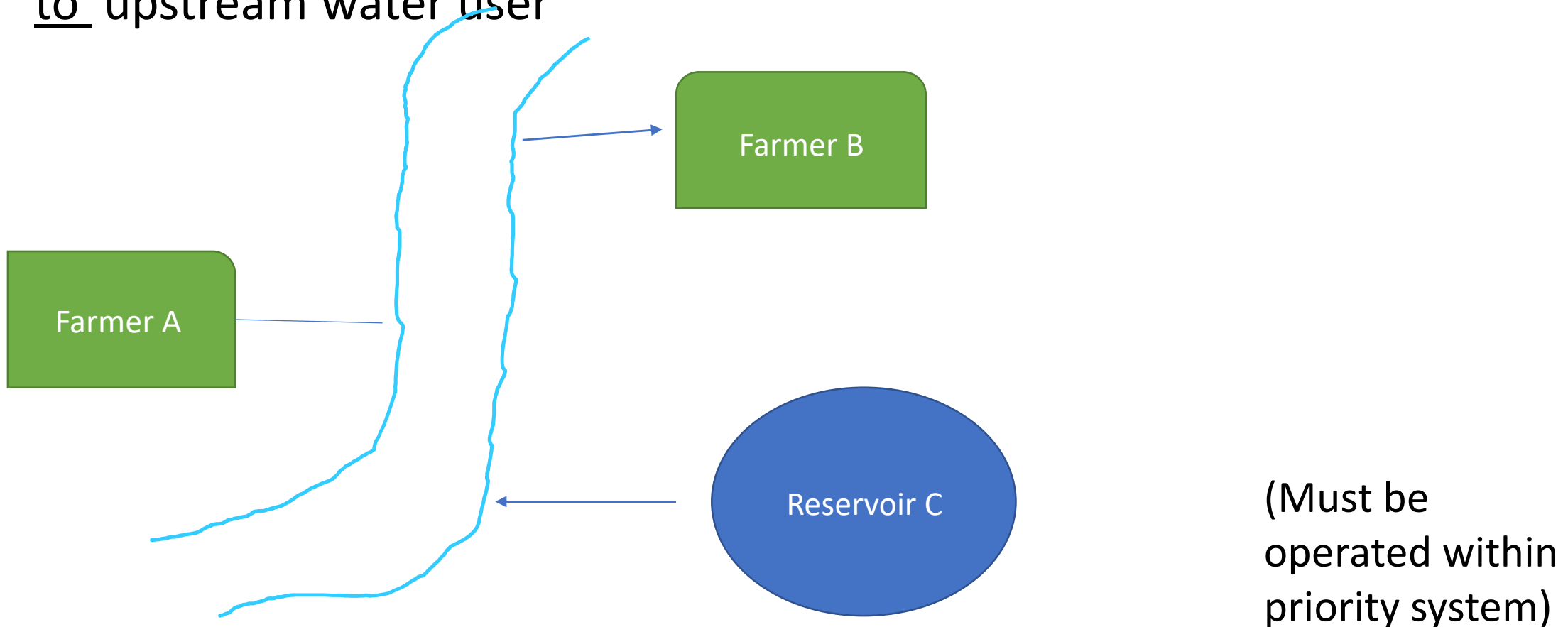
Change of Water Right



Change in Place of Use
Change in Type of Use
- Irrigation to Municipal

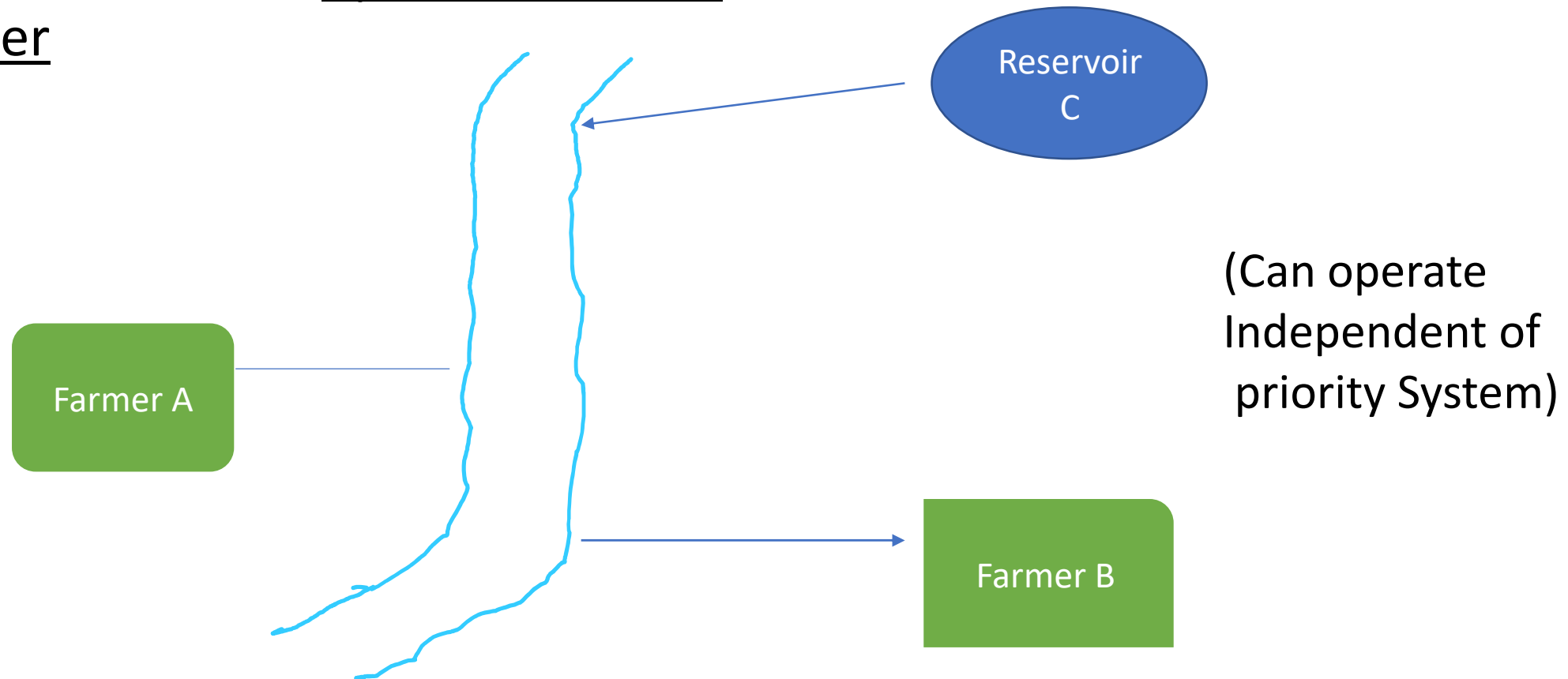
Obtain an Exchange Water Right

- Generally moves water from downstream source of substitute supply to upstream water user



Obtain approval of an Augmentation Plan

ally moves water from upstream source of substitute water to stream user



More Water Needed for Continued Growth

- Limit the number of users or get a bigger pool





Solution: Get a Bigger Pool

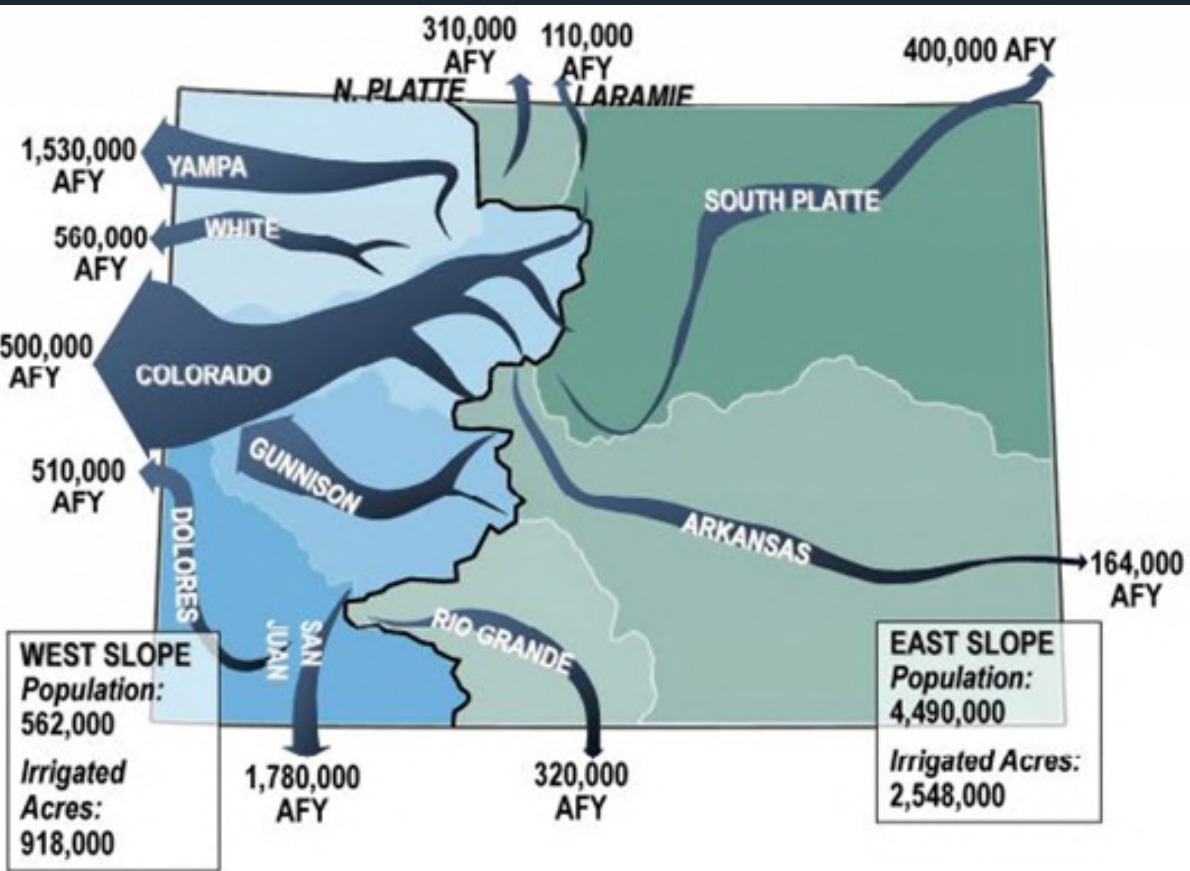
- Transmountain diversions of West Slope water to East Slope users
- 

West Slope to East Slope Transmountain Diversions

- Fryingpan – Arkansas Project – West Slope Arkansas River water for irrigation and municipalities to Colorado Springs area (200,000 AF annually)
- Twin Lakes project – West Slope Arkansas River water for Fowler, Ordway areas (20,000 AF annually)
- Moffat Tunnel – West Slope Fraser River (Colorado River) water through Moffat Tunnel to Denver
- Colorado-Big Thompson Project (CBT) – Senate Doc. 80 - Colorado River water originally for farmers in Greeley area, but now serves much of northern Front Range, including Evans (300,000 AF annually)

Transmountain Diversions

- Not part of the native water supply – “new” water
- Not subject to the prior appropriation system
- Governed by contracts between the “owner” and “users”
- Water can be “reused” to extinction




Epilogue: Interstate Compacts

- South Platte River - Nebraska
- Arkansas River - Kansas
- Colorado River - Colorado River Compact

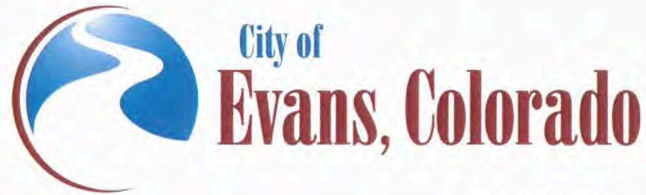


Stay tuned:

- Water Law 101 – Part 2: How all this works for the City of Evans
 - Evans has:
 - - Native water rights that operate within the priority system
 - - Shares in mutual ditch companies
 - Exchange water rights
 - Plans for augmentation
 - Transbasin water rights
- 



QUESTIONS???



1100 37th Street
Evans, Colorado 80620-2036

MEMO

DATE: January 14, 2021
TO: Randy Ready, Jim Becklenberg, Jacque Troudt
FROM: Rick R. Pickard, P.E.
Senior Civil Engineer

RE: End of Year Summary of CAP Status

This update is based on the reported 2020 monthly Master Meter reads provided by Doug Seely. Doug receives this data from the City of Greeley which reflects master meter readings. Data is illustrated as “Gross Usage and Net Usage”. Net usage is determined by subtracting the raw water credits provided by Greeley from the Gross Usage. Greeley currently provides a raw water credit to compensate Evans for the water used to serve to a small number of Greeley customers.

Note, when Evans takes over the 17 Greeley customers, Greeley will no longer be obligated to provide the raw water credit. Reference the table below for a summary of reported usages for the 2020 water year (January – December).

City of Evans Total Master Meter Demand

	Gross 2020 (ac-ft)	Greeley Customers*	Net 2020 (ac-ft)	Net 2020 (ac-ft/day)	Net 2019 (ac-ft)	2019-20 Change (ac-ft)	(%)
Jan	128.2	0.21	128.0	4.1	132.9	-4.9	-3.7%
Feb	120.1	0.19	120.0	4.3	119.8	0.2	0.2%
Mar	128.7	0.21	128.5	4.1	133.0	-4.5	-3.4%
Apr	146.9	0.29	146.6	4.9	156.8	-10.2	-6.5%
May	296.5	0.60	295.9	9.5	231.3	64.6	27.9%
Jun	376.8	0.88	375.9	12.5	287.7	88.2	30.7%
Jul	400.2	1.16	399.0	12.9	344.2	54.7	15.9%
Aug	374.2	0.96	373.2	12.0	374.8	-1.6	-0.4%
Sep	304.7	0.86	303.8	10.1	305.6	-1.8	-0.6%
Oct	216.1	0.44	215.6	7.0	179.1	36.5	20.4%
Nov	129.1	0.01	129.1	4.3	125.7	3.4	2.7%
Dec	131.5	0.00	131.5	4.2	125.9	5.6	4.4%
YTD Total	2752.8	5.81	2747.0		2516.9	230.1	9.1%

For the purposes of determining the CAP status for the year 2020 as well as for the years 2021 – 2025 the following spreadsheet was prepared. The spreadsheet considers the **Reported usages** for 2020 as well as **Projected usages** for the years 2021 – 2025.

2020 Summary Comprised of Reported 2020 Jan - Dec. NET demands							Projected Net 2021-2025 Usages (using 2% growth per year)				
Month	Year	Year	Year	Year	Change From 2020 to 2019		Projected 2021 @ 2.0% Growth from 2020	Projected 2022 @ 2.0% Growth from 2021	Projected 2023 @ 2.0% Growth from 2022	Projected 2024 @ 2.0% Growth from 2023	Projected 2025 @ 2.0% Growth from 2024
	2017	2018	2019	2020	(ac-ft)	(%)					
Jan	128.90	125.10	132.90	128.0	-4.9	-3.7%	130.6	133.2	135.8	138.6	141.3
Feb	120.90	117.00	119.80	120.0	0.2	0.2%	122.4	124.8	127.3	129.9	132.5
Mar	135.10	135.50	133.00	128.5	-4.5	-3.4%	131.1	133.7	136.4	139.1	141.9
Apr	188.10	169.70	156.80	146.6	-10.2	-6.5%	149.5	152.5	155.6	158.7	161.9
May	225.80	284.60	231.30	295.9	64.6	27.9%	301.8	307.9	314.0	320.3	326.7
Jun	370.30	372.10	287.70	375.9	88.2	30.7%	383.4	391.1	398.9	406.9	415.0
Jul	379.00	357.60	344.20	399.0	54.8	15.9%	407.0	415.1	423.4	431.9	440.5
Aug	303.90	344.60	374.80	373.2	-1.6	-0.4%	380.7	388.3	396.0	404.0	412.0
Sep	281.90	310.20	305.60	303.8	-1.8	-0.6%	309.9	316.1	322.4	328.8	335.4
Oct	156.30	184.60	179.10	215.6	36.5	20.4%	219.9	224.3	228.8	233.4	238.0
Nov	128.60	131.30	125.70	129.1	3.4	2.7%	131.7	134.3	137.0	139.7	142.5
Dec	133.00	130.60	125.90	131.5	5.6	4.4%	134.1	136.8	139.5	142.3	145.2
TOTAL	2,552	2,663	2,517	2,747	230.3	9.2%	2,802.0	2,858.1	2,915.2	2,973.5	3,033.0
Reported readings				2020 vs: 2019	9.2%	Increase					
				2019 vs: 2018	-5.8%	Decrease					
				2018 vs 2017	4.4%	Increase					
Summary of CAP Over/Under, Cost of CAP Increase, New CAP as a result of Over CAP											
Projected Annual Growth	2.0%		Year	2020	2021	2022	2023	2024	2025		
Current CAP (ac-ft)	2,766.4		Under CAP	19.3							
CAP cost/ac-ft (2021)	\$22,807		Over CAP		35.6	56.0	57.2	58.3	59.5		
			CAP Cost		\$812,659	\$1,278,123	\$1,303,686	\$1,329,760	\$1,356,355		
			New Generated CAP		2,802.0	2,858.1	2,915.2	2,973.5	3,033.0		

Summary of Findings:

- The 2020 year total **Reported** usage equals 2,747 ac-ft. The current CAP level is 2,766.4 ac-ft. The year ended with approximately 19.3 ac-ft below the current CAP.
- To Project usage for the year 2021 we increased the 2020 Recorded usage by 2%, resulting in a Projected usage equal to 2,802 ac-ft which would be approximately **35 ac-ft above the current CAP**. The projected cost would be \$812,659 based on the 2021 CAP rate equal to \$22,807.
- To Project the annual usage for the years 2022 through 2025, we increased the previous years total by 2% which is illustrated in the above spreadsheet.

The City did not exceed the CAP in 2020. Evans will be receiving a confirmation from Greeley that there will be no CAP payment required for 2020.

In discussing the 2021 Projected usage, the City should realize a reduction of potable water demand (approximately 80 ac-ft) with the completion of the Tuscany Tract O non-potable system

Please contact me to discuss in further detail.

CITY COUNCIL

CITY MANAGER'S REPORT – AGENDA ITEM

DATE: January 19, 2021

SUBJECT: WaterNow Alliance's Accelerator Program, Award to the City of Evans

PRESENTED BY: James L. Becklenberg, City Manager
Randy Ready, Assistant City Manager
Anne Best Johnson, Community Development Director

ITEM DESCRIPTION:

WaterNow Alliance is a national organization who assists communities with water stewardship and conservation. They are based in California but also have an office in Colorado. One of the programs managed through WaterNow is the Project Accelerator program. This program offers technical and program assistance to communities through a competitive selection process. Up to 250 hours of technical assistance is provided to selected communities for an anticipated award of \$25,000.

The application is a competitive process and past projects include the following:

- Jordan Valley Water Conservancy District of Utah – development of improved water efficiency standards
- Summit and High Counties in Colorado – development of a regional outdoor water efficiency program
- New Orleans, Louisiana – Green Street Assessment program development
- Ontario and San Clemente, California – HOA Water Efficient landscape outreach and education program development

Through the work completed by the Water Efficiency Plan, the City's participation with Northern Colorado Water Conservancy District programs, and the Sonoran Institute workshop and technical assistance grant awarded in early 2020, the City learned of the Project Accelerator program and applied in December, 2020. WaterNow announced today that the City of Evans has received this grant award.

The program to be developed includes three main deliverables:

1. Develop the program for indoor and outdoor water audits for every property in Evans inclusive of Commercial, Industrial and Residential property (regardless of income).
 2. Design the direct-install program for income-qualified residents.
 3. Work with the City of Greeley Water Department to identify partnership opportunities, resident and business give-aways, Evans-specific literature, and
-

an educational campaign regarding water conservation/stewardship practices for individual homeowners and business owners. Literature will be developed in English and Spanish.

The Evans program will be developed following industry best practices as a legacy project for Staff to deploy.

The City of Evans has requested funding assistance from the Weld County Community Development Block Grant (CDBG) program to fund the physical fixtures and direct installation of fixtures for income-qualifying households.

MATERIAL IF NEEDED:

Approximately 1,000 households in Evans qualify for the Low-Income Energy Assistance Program (LEAP).

Program Funding / Cost Outline:

1. Water Conservation Program development for the water fixture direct install program- \$25,000 – in-kind support from WaterNowAlliance
2. Water Efficient Fixture replacements (toilets, shower heads, aerating faucets) and installations proposed to be funded through a CDBG grant over a three year commitment request at approximately \$800 per home with 25 homes funded each year. The following budget breakdown was provided through Aurora Water's direct-replace program in partnership with Mile-High Youth Corps as well as confirmation from the Weld County Youth Corps coordinator.
 - a. A maximum of two toilets at \$450 for the two
 - b. A maximum of two shower head replacements at \$17 each
 - c. A maximum of three sink aerator replacements at \$6 each
 - d. A maximum of 3 smoke/carbon monoxide detectors at \$50 each
 - e. A maximum of \$75 in lightbulb replacement at each home – interior and exterior lighting
 - f. A half-crew from Weld County Youth Corps at \$2,500/week for 10 weeks
3. CDBG fund request would be \$32,500 each year
 - a. \$20,000 - Supplies estimated at \$800.00 per house and 25 homes per year
 - b. \$25,000 – Weld County Youth Corps
4. The City's match would be \$12,500 each year plus staff time to administer the grant and to manage the program.

STAFF REQUEST:

Staff is informing Council of the WaterNow award. This award was announced nationally today. A future request to authorize the City Manager to execute the MOU with WaterNow will be presented at a future Council Meeting.

FINANCIAL SUMMARY:

Project 2: Water Smart Fixtures

Year 1: \$25,000 WaterNow Alliance Grant for program development
 \$32,500 CDBG funding for fixtures and Youth Corps
 \$12,500 City funds for fixtures from the Water Fund

Years 2 & 3: \$32,500 CDBG funding for fixtures, each year
 \$12,500 City funds for fixtures from the Water Fund, each year

CITY COUNCIL WORK SESSION

AGENDA REPORT

DATE: December 15, 2020

SUBJECT: Consideration of Support for 2021 Weld County Community Development Block Grant Program Applications

PRESENTED BY: James L. Becklenberg, City Manager
Randy Ready, Assistant City Manager
Anne Best Johnson, Community Development Director

ITEM DESCRIPTION:

Until now, the City's only available application process for Community Development Block Grant (CDBG) funding has been to compete for funding amongst all communities in the state in counties that were not considered to be urban. Weld County's new classification as an Urban County makes possible participation in a grant program reserved only for communities in Weld County. The total amount of funding available in the county-administered program is smaller than the state pool, but there will be fewer applicants for the funding. Local match is not required; however, local match and partnerships will make the grant applications more competitive.

The Weld County CDBG Program will be in its inaugural year in 2021. City Council entered into an Intergovernmental Agreement with Weld County in April 2020 to participate in the Weld County-only CDBG Pool. Grant applications are due for CDBG funding on or before December 31, 2020. Recipients will be announced during Spring 2021. The City has been working with the County CDBG Administrator, Don Sandoval to refine two project options. Both staff-recommended projects are described below.

Approximately 1,000 households in Evans qualify for the Low-Income Energy Assistance Program (LEAP). Qualified households must meet income standards that do not exceed 60% of the State Median Income. Evans has several neighborhoods that qualify for extra credit in the grant application scoring process because of their low- and middle-income resident populations.

Project 1: Infrastructure

Staff recommends seeking CDBG funds to support infrastructure improvements on Idaho Street between 40th and 42nd Streets. The cost for Phase I is approximately \$1.8 million and includes the following scope of work. Refer to the map on the following page for project location.

1. Assessment of the viability of existing infrastructure and design of the intended improvements.
 2. Engage the public regarding the intended improvements.
-

-
- Construct the storm outlet to the southwest corner of Idaho and 42nd Street to the storm sewer located at Idaho and 40th Street.
 - Construct the storm outfall from 42nd street south to the river through privately owned property.

Project 2: Water Conservation Program development and Water Efficient Fixture Replacement Program

The City of Evans participated in a summer 2019 workshop sponsored by the Sonoran Institute to start envisioning water conservation strategies in collaboration with Greeley Water. An outcome of this participation was eligibility to apply for a Sonoran Institute grant in the amount of \$10,000. The City received this grant in February and the Sonoran Institute funded the work of Marjo Curgus with Del Corazon Consulting to perform the work needed to help incorporate water efficiency and conservation into the City's Master Plan. Ms. Curgus worked directly with key City Staff to ensure her work product achieved a seamless integration with the Water Efficiency Plan (WEP) that is a required document for all municipal water providers. Several desired outcomes are listed in the WEP, one of which includes integration of water conservation and efficiency policies into the overall City Master Plan.

Council received the draft Master Plan components for consideration at their work session held on September 1, 2020 and expressed support for water conservation efforts in the City. Ms. Curgus has informed the City of a grant through a national program called WaterNow Alliance. WaterNow Alliance is offering a \$25,000 grant through the Project Accelerator program to fund the development of a water conservation program. The grant will consist of 250 hours of staff time to assist staff in developing a program.

If awarded, WaterNow Alliance will assist the City in developing the first water conservation program through the newly-adopted Water Efficiency Plan. The grant will serve as a legacy for the City's program. The outline of the program concept can be found below but do note the final program will be finalized with the City through the Project Accelerator Program, if selected. Funding for the hardware/fixtures and installation will be requested through CDBG funds, as identified in the Program Outline below. CDBG funds will be sought to engage the Weld County Youth Corps in the water efficiency audits as well as installation of the fixtures. The Weld County Youth Corps will also inspect smoke detectors, carbon monoxide detectors and lightbulbs. If needed, these additional devices will be replaced through the CDBG funds.

Program Funding / Cost Outline:

1. Water Conservation Program development for the water fixture direct install program- \$25,000 – in-kind support from WaterNowAlliance
 2. Water Efficient Fixture replacements (toilets, shower heads, aerating faucets) and installations proposed to be funded through a CDBG grant over a three year commitment request at approximately \$800 per home with 25 homes funded each year. The following budget breakdown was provided through Aurora Water's direct-replace program in partnership with Mile-High Youth Corps as well as confirmation from the Weld County Youth Corps coordinator.
 - a. A maximum of two toilets at \$450 for the two
 - b. A maximum of two shower head replacements at \$17 each
-

-
- c. A maximum of three sink aerator replacements at \$6 each
 - d. A maximum of 3 smoke/carbon monoxide detectors at \$50 each
 - e. A maximum of \$75 in lightbulb replacement at each home – interior and exterior lighting
 - f. A half-crew from Weld County Youth Corps at \$2,500/week for 10 weeks
 3. CDBG fund request would be \$32,500 each year
 - a. \$20,000 - Supplies estimated at \$800.00 per house and 25 homes per year
 - b. \$25,000 – Weld County Youth Corps
 4. The City's match would be \$12,500 each year plus staff time to administer the grant and to manage the program.

Neither of the grant applications are guaranteed to be funded because the City will be competing with all of the other municipal jurisdictions in Weld County (except Greeley) that submit grant requests.

STAFF REQUEST:

Staff is requesting Council support to pursue these two grant opportunities or Council direction to change the grant applications to pursue funds for different projects.

FINANCIAL SUMMARY:

Project 1: Infrastructure on Idaho

Phase I \$ 552,500 from the City Street Fund + 30% contingency
\$ 650,000 from the City Storm Sewer Fund + 30% contingency
\$ 390,000 from the City Water Fund
\$ 111,475 Design fees
\$1,703,975 Total Cost
-\$ 850,000 CDBG Request
\$ 853,975 City's estimated net portion of Phase I

Phase II \$1,726,155 from the City's Stormwater Fund, with possible CDGB or Energy Impact Grant Assistance to help offset the costs.

Project 2: Water Smart Fixtures

Year 1: \$25,000 WaterNow Alliance Grant for program development
\$32,500 CDBG funding for fixtures and Youth Corps
\$12,500 City funds for fixtures from the Water Fund

Years 2 & 3: \$32,500 CDBG funding for fixtures, each year
\$12,500 City funds for fixtures from the Water Fund, each year

REQUESTING FROM CITY COUNCIL:

Staff is seeking questions, comments and input from Council about the grant applications, and support from Council for staff to submit grant requests for the projects/program listed in this memo. Alternatively, Council may provide direction to change the grant application(s) to pursue

funding for different purposes. Funding is not guaranteed, but information from Weld County indicates that the communities within the county will be welcome to submit CDBG funding applications each year for as long as the program continues in its current iteration.

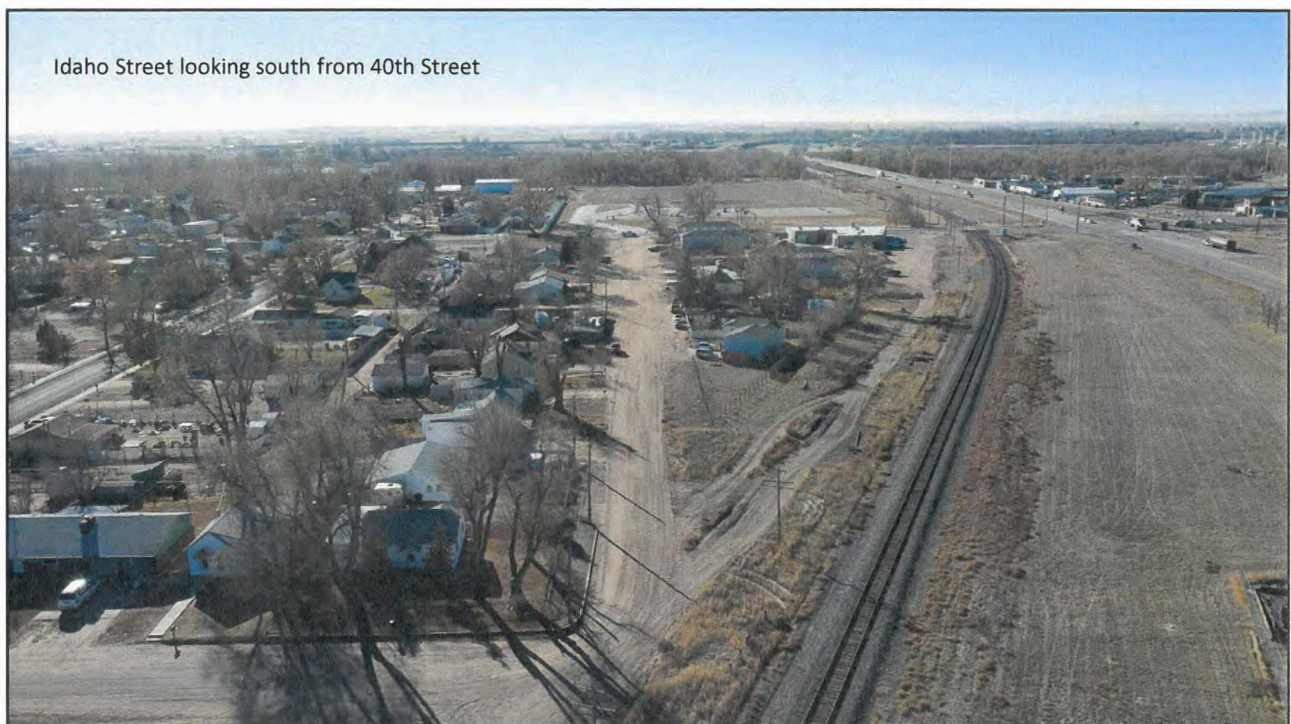
ATTACHMENTS:

Attachment 1: Support from Developer

Attachment 2: Cost estimate from Engineering



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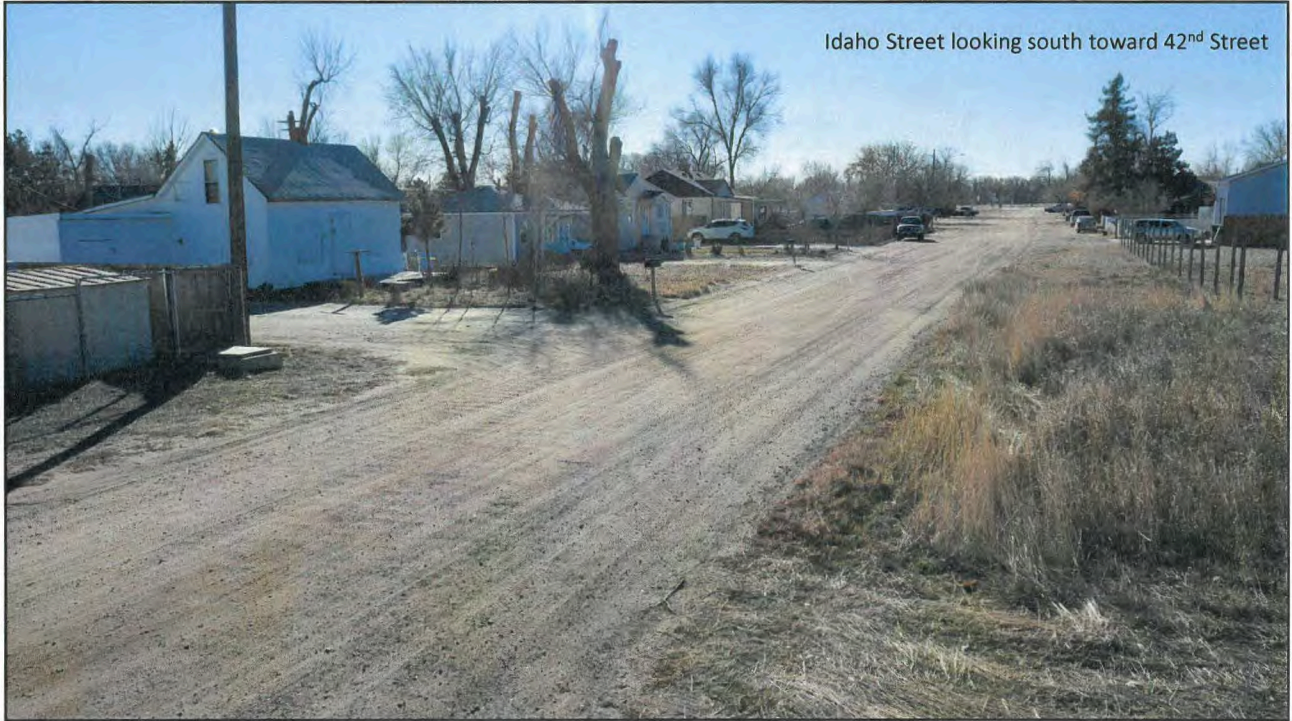
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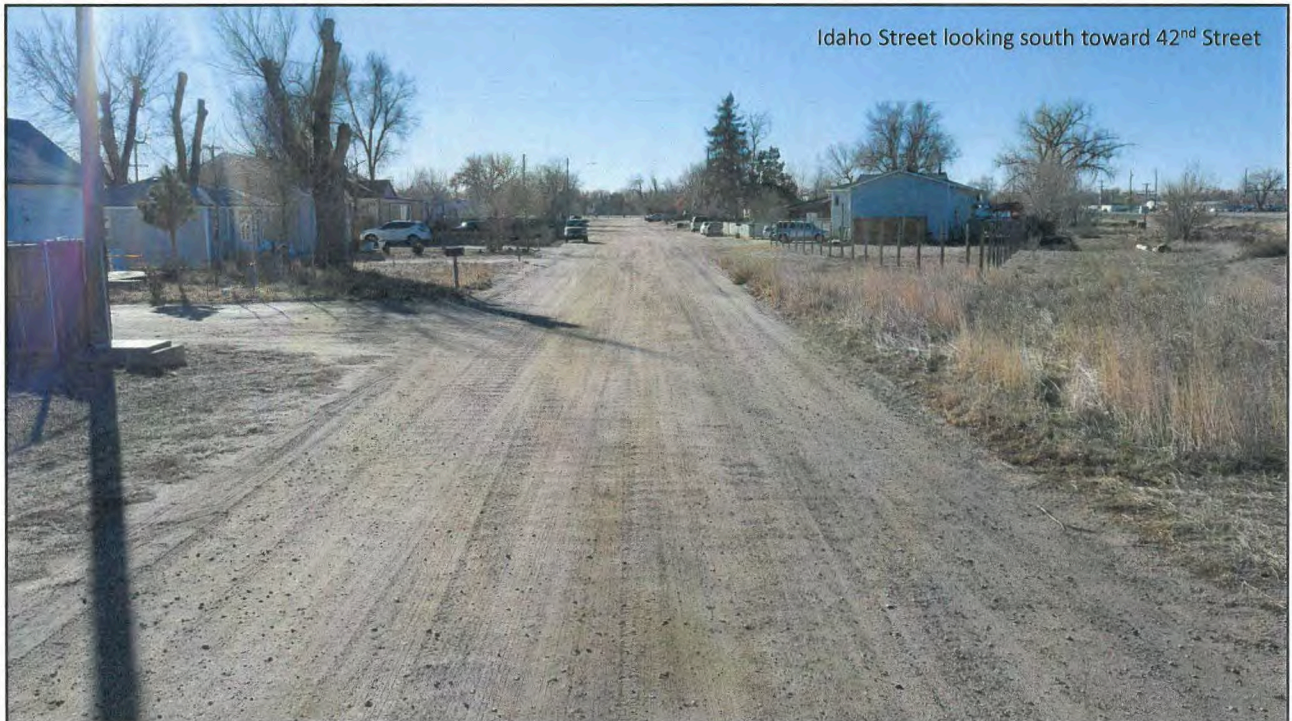
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Randy Ready

From: Anne Best-Johnson
Sent: Monday, January 18, 2021 3:44 PM
To: Don Sandoval
Cc: Jim Becklenberg; Randy Ready; Mark Oberschmidt
Subject: CDBG - Evans - Idaho Street
Attachments: 2021 CDBG Schedule 01-18-2021.pdf

Dear Don,

Thank you again for the opportunity to revisit our scope. You will find the revised budget below and a tentative timeline attached. After review, let me know if the CDBG Application package should be revised.

Idaho Street and RR Pond Project Budget Estimate for Design and Phase 1

Construction WITH ROAD PAVING

Source	Amount	%age	Notes
CDBG Design	\$200,000	11.2%	1
CDBG Construction	\$500,000	27.9%	
CDBG Subtotal	\$700,000	39.1%	
Evans - Construction	\$1,085,000	60.6%	2
Developer - Survey	\$5,000	0.3%	
Total	\$1,790,000	100.0%	
Ph 1 Cost (5)	\$1,790,000		

Sincerely,
Anne

Anne Best Johnson, AICP, MBA
Community Development Director

Email: abjohnson@evanscolorado.gov

Phone: 970-475-2228

Fax: 970-475-1166

1100 37th Street, Evans, CO 80620-2036



www.evanscolorado.gov

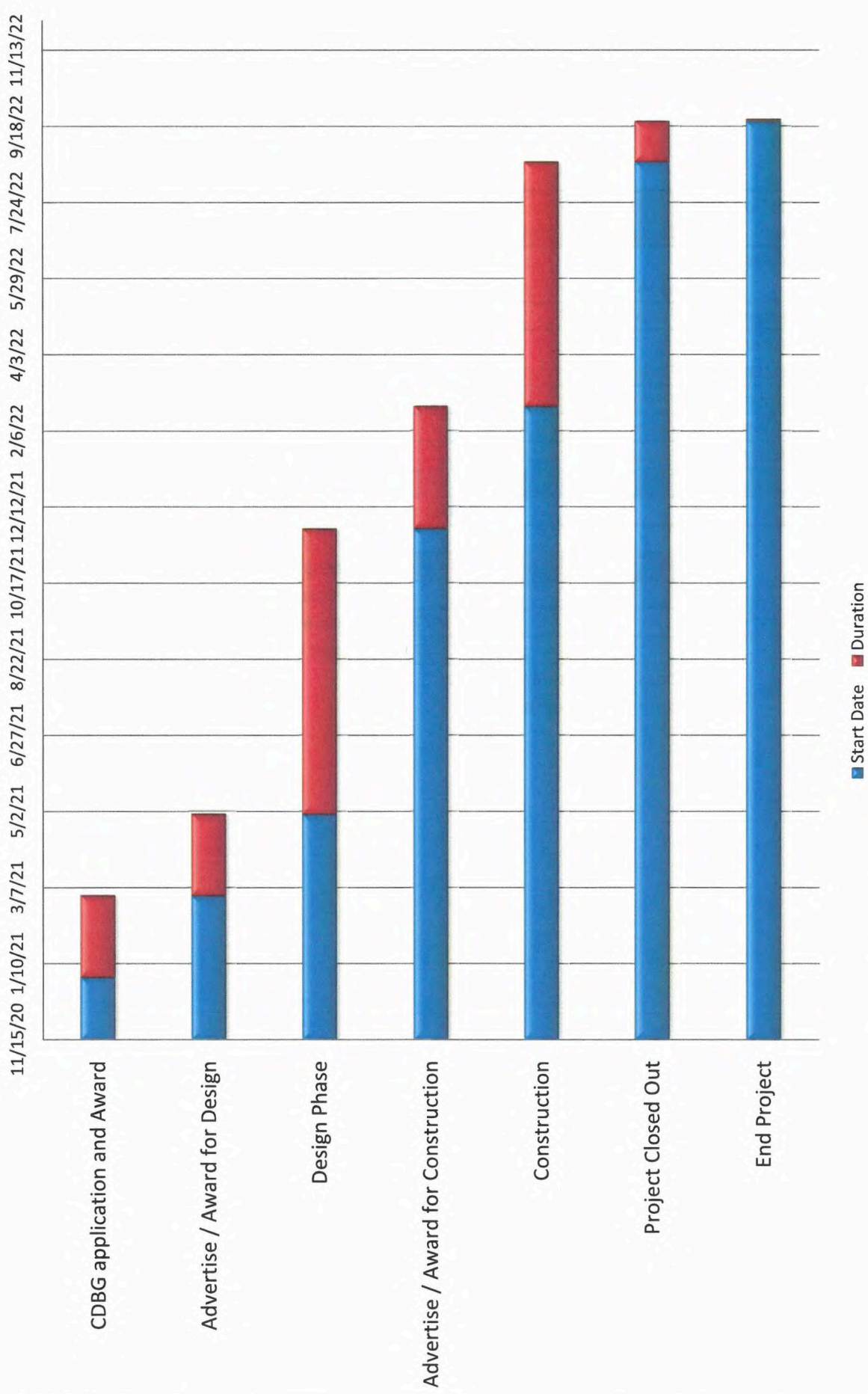


Idaho Street CDBG Project Schedule					
Task	Start Date	Duration (days) (5)	Duration (Months)	Running Total Days	Running Total Project Days
CDBG application and Award	Thursday, December 31, 2020	60	2	60	
Advertise / Award for Design	Monday, March 1, 2021	60	2	120	
Design Phase	Friday, April 30, 2021	210	7	330	210
Advertise / Award for Construction	Friday, November 26, 2021	90	3	420	300
Construction	Thursday, February 24, 2022	180	6	600	480
Project Closed Out	Tuesday, August 23, 2022	30	1	630	510
End Project	Thursday, September 22, 2022	1		631	511
Buffer days		30	21		17

Notes

- 1 18 months to complete design and build Ph 1
- 2 540 days assuming 30 dpm
- 3 4/30/2021 Assumed project start date
- 4 10/22/2022 Project Completion deadline
- 5 does not consider holidays
- 6 dpm = days per month

Idaho Street CDBG Preliminary Schedule



CITY COUNCIL AGENDA REPORT

DATE: January 19, 2021
SUBJECT: Consideration of 2021 Waterline Design Project Contract Award
PRESENTED BY: James Becklenberg, City Manager
Randy Ready, Assistant City Manager
Mark Oberschmidt, P.E., City Engineer

ITEM DESCRIPTION:

In 2020, City Staff from the Operations and Engineering Departments evaluated a number of prospective waterline replacement projects throughout the City and broke them down by degree of urgency. Waterlines with a history of breaks or those that, if they did break would pose serious risk and cost to repair, were deemed urgent and in need of replacement very soon. These were recommended as early action items in the Water Fund Capital Improvement Plan. A total of eight (8) projects were deemed most urgent and three (3) of them have been approved by City Council to proceed through the design phase in the 2021 Capital Improvement Plan, with construction to follow in 2022 or 2023.

Project 1—State Farm Road

Replace existing waterline in State Farm Road from Glendale Drive to 29th Street. Reconstruct the State Farm Road from Glendale Drive to 29th Street.

Project 2 – 31st Street to 35th Street and Across U.S. 85

Replace existing waterline in West Service Road from 31st Street to 35th Street. Replace existing waterline under Hwy 85 at 35th Street and then replace existing waterline in State Street from 35th Street to 31st Street.

Project 3 – 37th Street to 39th Street and Across U.S. 85

Install new waterline in the West Service Road from 37th Street to 39th Street and then replace existing waterline under Hwy 85 at 39th Street. Replace existing waterline in St. Vrain Street from 39th to 40th Street. Install new waterline in State and Denver Streets from 39th Street to 37th Street.

The City advertised the project on Bid Net and on the City Website on December 3, 2020. A pre-proposal meeting was held on December 10, 2020. Ten (10) proposals were received on January 7, 2021.

FINANCIAL SUMMARY:

The City has \$250,000 in the 2021 Water Fund capital budget to complete the design of these three line replacement projects. The City received ten (10) proposals for the design work and staff reviewed the proposals based both on their quality and completeness and on the fee estimates as staff is looking to recommend the lowest responsive bidder to best meet the needs of

the City on this important infrastructure replacement design project and not just the lowest cost bidder. After review and scoring the proposals, the fees were considered and added into the scoring table with the lowest fee given the highest possible score. Three of the consultants had fees in excess of the City's budget and therefore were rejected.

Consultant	Fee	Proposal Score
• Ditesco	\$239,391.00	130
• Sanderson Stewart	\$193,548.50	125
• JVA	\$198,900.00	109.4
• Coffey Engineering	\$214,251.00	105
• Farnsworth Group	\$224,145.00	103
• Tetra Tech	\$249,835.00	91
• Plummer	\$249,388.99	83
• Wilson	\$322,795.00***	
• Kimley Horn	\$356,907.00***	
• Merrick	\$358,056.50***	

*** fee exceeds design budget

RECOMMENDATION:

The proposal review resulted in Ditesco receiving the highest score and recommendation for contract approval for the following reasons:

- Ditesco's proposal most thoroughly includes important project design considerations including constructability, traffic control, maintenance, and how to keep residents and businesses in service during construction.
- Ditesco's proposal included conceptual-level plan documents showing an example of one of the project designs with risk mitigation considered.
- Ditesco has previous experience in Evans on a project involving boring under U.S. 85.
- Ditesco's proposal includes the necessary time and cost for a potholing subcontractor.
- Ditesco's proposed geotechnical and tunneling engineering subconsultants are both excellent firms with a great deal of experience on similar projects
- Ditesco's proposal considered some the risks involved with the project and makes recommendations on how they can be mitigated during the design process.

After considering the fees in the scoring matrix, Ditesco maintains the highest proposal rating. Based on this, and previous successful projects the City has completed with Ditesco, Staff is recommending awarding the contract to Ditesco in the amount of \$239,391 with a not to exceed amount of \$250,000 (~4% contingency).

SUGGESTED MOTIONS:

"I move to award the 2021 Waterline Design Contract to Ditesco and to authorize the Mayor's signature on an agreement in the amount of \$239,391 with a not to exceed amount of \$250,000; and with the \$10,609 in contingency funding to be accessed only with City Manager approval to handle unforeseen circumstances that may occur with the project."

"I move to deny the award of the 2021 Waterline Design Contract."

ATTACHMENTS:

- Summary of Proposals
- Summary of Proposal Scoring
- Professional Services Agreement including Scope and Fees
- Project Maps

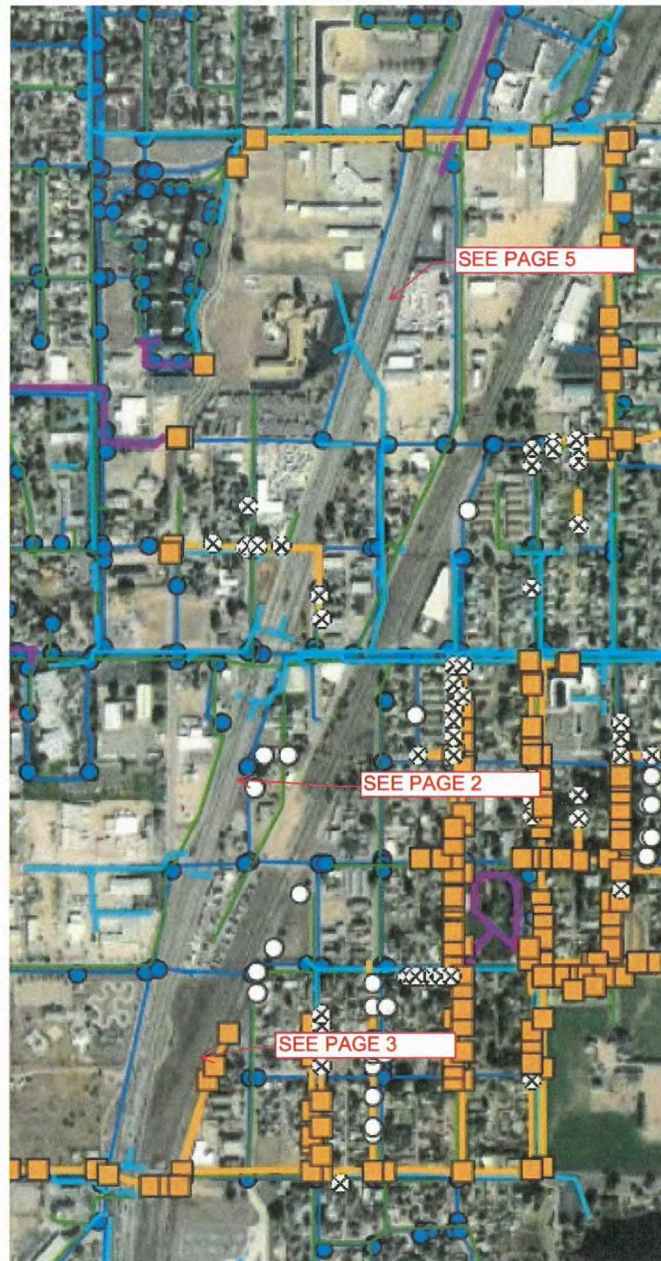


Figure 3: WL 31st to 40th



Figure 1: Waterline 37th to 40th

reduce crossings of 85 so that we only have 2 at 35th and 39th - both 12-inch



Figure 2: WL 37th to 42nd

reduce crossings of 85 so that we only have 2 at 35th and 39th - both 12-inch- CAN KEEP THE ONE AT 40TH AS LONG AS IT IS VIABLE

STATE FARM ROAD (GLENDALE TO STATE FARM)
CONCEPT PLAN





reduce crossings of 85 so that we only have 2 at 35th and 39th - both 12-inch- CAN KEEP THE THE ONE AT 40TH AS LONG AS IT IS VIABLE

Exhibit B

Utility Planning Scoping Document

General

1. Coordinate Utility Master Planning with work by Evans Comprehensive Master Plan Team currently in progress.

Central Weld County Water District (CWCWD) Feasibility Study

61-80-8224-8604

1. Work with CWCWD as a possible treated water source for Evans Growth Management Area (GMA)
2. Update maps showing limits of Evans and CWCWD system
3. CWCWD "Hidden Loop" water system improvements question/research
4. Determine what kind of infrastructure costs would be ours? CWCWD's? Shared?
5. Information needed
 - a. GIS layers of Evans and CWCWD waterlines to be provided by City of Evans
 - b. Demand information/ Potential Land use/ zoning to be coordinated with ongoing Comprehensive Master Plan
 - c. Service Area and planned development to be coordinated with ongoing Comprehensive Master Plan
 - d. Maintenance issues on existing pipes mostly for CWCWD City of Evans ?? system
6. Tasks
 - a. Research
 - b. Determine available treated water supply from CWCWD
 - c. Compiling maps of utilities and projected land uses
 - d. Define limits of service area that can be served using current Evans water system
 - e. Define needed Evans water system infrastructure to supply areas within the Growth Management Area which cannot be served by current Evans water system
 - f. Population and demand projections
7. Meetings – all virtual unless in the field
 - a. Kick off meeting with CWCWD
 - b. Assume four (4) progress meetings
8. Deliverables
 - a. Memo documenting the water system improvements required on the part of both Evans and CWCWD to have CWCWD provide treated water to areas within the Evans GMA.
 - b. Conceptual level cost estimates for new infrastructure needed to allow Evans to purchase treated water from CWCWD.

Water Demand Analysis (Water Model)

61-80-8225-8605

1. Update the water model (currently using Innovyze InfoWater Software)
 - a. Select software based on
 - i. Cost of model
 - ii. Number of nodes and pipes that can be modeled
 - iii. Ease of use
 - iv. Availability of online or in person help
 - b. In house use eventually so nonproprietary models would be preferred
 - c. Consultant to operate for near term and train in house staff
2. Goals of model
 - a. Plan for pipe sizes to supply new development- distribution and transmission
 - b. Find pinch points in existing system and upsize as needed. This analysis should consider the previous Master plan for trouble areas
 - c. Coordination with operations about areas they know are problems – hydraulically, maintenance
 - d. Look for model problems such as low pressure, high velocities, fire flow
 - e. Model must be GIS based
3. Coordination with Greeley and CWCWD water models
4. Tasks
 - a. Convert existing model to new model
 - b. Add new lines to model from best available information to be provided by Evans
 - c. Add new lines from CAD files provided by developers
 - d. Add proposed lines as a layer in the model
 - e. Calibrate model
5. Meetings – all virtual unless in the field
 - a. Kick off meeting with City
 - b. Assume four (4) progress meetings
6. Deliverables
 - a. A functioning model
 - b. User's Manual

Utility Feasibility Study South Evans (Water and Sanitary Sewer)

61-80-8226-8604- Water

1. Determine limits of area that can currently be served by Evans with water
2. Connection between CWCWD and Evans Water
 - a. Master meter (s)
3. See limits of Evans Growth Area – these may change with the ongoing Comprehensive Master Plan
4. Possible storage tanks for wholesale transmission from CWCWD, City of Greeley and distribution to Evans
5. Meetings– all virtual unless in the field
 - a. Kick off meeting with City

- b. Assume four (4) progress meetings
- 6. Deliverables
 - a. Report including
 - i. Executive summary
 - ii. Limits of possible service area
 - iii. Estimated population at build out
 - iv. Estimated population growth rate
 - v. Estimated average daily demand, peak daily demand based on various years
 - vi. Estimated fire flow demand based on build out

62-80-8226-8604- Sanitary Sewer

- 1. Determine limits of area that can be served by Evans with Sewer
 - a. Use current Growth Limits south of River as largest area to start
 - b. The GMA may change with the in progress Comprehensive Master Plan
- 2. Potential opportunities for regional coordination or consolidation with surrounding Municipalities or Organizations (i.e.: could this area be served by La Salle).
- 3. Lift Station required for sewer to convey under the South Platte River to the current WWTP located on 49th Street just east of 35th Avenue
 - a. Location would affect
 - i. Amount of force main
 - ii. Size of pumps
 - iii. Area that can be served by Gravity mains (potentially)
- 4. Design of lift Station to consider
 - a. Floodplain issues
 - b. Wetland Issues
 - c. Groundwater issues
 - d. Plan for access and maintenance
 - e. Property Acquisition
 - i. Plan for expansion
 - f. Work around proposed gravel mining properties south of the river
- 5. Meetings– all virtual unless in the field
 - a. Kick off meeting
 - b. Assume four (4) progress meetings
- 6. Deliverables
 - a. Executive summary
 - b. Limits of possible service area
 - c. Estimated population at build out
 - d. Estimate population growth rate
 - e. Estimated average daily flow, peak daily flow
 - f. Conceptual Sewer collection system design and sizing
 - g. Lift station requirements
 - h. Conceptual cost estimates for lift station

City Provided Resources to Selected Consultant

1. GIS mapping of Utilities
2. Existing model data
3. City GMA maps and proposed land uses
4. Previous Master Plans/ Reports
 - a. 2005 HDR Water Master Plan
 - b. 2009 Water Conservation Plan
 - c. 2011 Wastewater Master Plan
 - d. 2016 Drought Management Plan
 - e. 2013 Wastewater Utility Plan
 - f. 2014 Regional Water Transmission and Treatment Study
 - g. 2016 Dewberry Water Master Plan